

REMARKS

Applicant respectfully requests reconsideration of this application, as amended, and reconsideration of the Office Action mailed May 19, 2003.

James M. Copeland has been deleted from the listing of inventors in the above-identified application. This Amendment is accompanied by a Petition to Change Inventorship under 37 C.F.R. § 1.48(b), with the requisite fee. Amendment of the inventorship is respectfully requested.

Upon entry of this amendment, claims 1-21 and 26-34 will be pending in this application.

Claims 22-25 have been canceled without prejudice in view of Applicant's election in consideration of the restriction requirement. Applicant reserves the right to pursue such canceled claims in a divisional application.

New claims 26-34 are added by this amendment, and are supported by the specification and claims as originally presented. No new matter is presented in the new claims.

Applicant also submits with this response the declarations of Dr. Ted Bilderback and inventor Jay Fraleigh under 37 C.F.R. § 1.132 to traverse the rejections of the Examiner.

Claims 14-15, 17-18 and 20-21 were objected to based on dependency reference errors in these dependent claims. Applicant has amended the claims to correct these errors and correct the incorrect claim preamble language of claim 15 which referenced a "method" rather than properly referencing "a planting bed."

Claim 16 stands rejected under 35 U.S.C. § 112 for lack of antecedent basis. Claim 16 has been amended to remove the definite article "the" and particularly define the limitation of the water line including "a spray emitter" .

Claims 1-10, 14-18 and 20-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,709,049 to Baird (Baird '049) in view of U.S. Pat. No. 6,223,466 to Billings (Billings '466). Applicant respectfully traverses this rejection based on the declarations of Dr. Bilderback and Mr. Fraleigh and the failure of the prior art to provide any suggestion or motivation to arrive at the present invention directed to growing container plants in a raised bed.

As the Examiner is aware, three basic requirements must be met to establish a *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art references when combined must teach or suggest all the claim limitations. See MPEP § 2143. In applying these criteria, it has long been held that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." See MPEP 2143.01 (citing In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)).

The Examiner acknowledges that Baird '049 does not relate to growth of container plants, i.e., plants in containers, which is the particular focus of the subject invention and a limitation of all of the rejected claims ("container plant"). In particular, Baird '049's teachings relate solely to growing bare-root plants and for landscaping

weed-prevention around non-plant inanimate objects. As set forth in the attached declarations, and appreciated by those skilled in the art, the growth of bare-root plants in raised beds is well-known but does not teach or suggest methods for growing container plants to those skilled in the art. See *Dr. Bilderback's Declaration* at ¶ 6; *Mr. Fraleigh's Declaration* at ¶ 4-5.

Those skilled in the art will appreciate that bare-root plants are not easily replaced or transportable in nursery growing environments like the container plants of the present invention. A container plant of the present invention is efficiently removed and already in a container at the end of growing cycles and/or for replacement by another container plant.

Further, a container plant can also be provided with desired soil and nutrients in the container in which the plant is contained, unlike the bare-root beds of Baird '049 which rely on specific soil beds. Accordingly, desired soil and nutrients can be provided in the container medium without large tracts of favorable growing soil being necessary to support the bed. Baird '049 provides no teachings or suggestions in this regard.

While the Examiner acknowledges Baird '049 fails to teach or suggest all of the claim limitations, it is suggested that those skilled in the art would be motivated by Billings '466 in combination with Baird '049 to arrive at the present invention. However, there is no motivation to combine the bare-root teachings of Baird '049 with the pot in pot teachings of Billings '466 in either of the references or in the prior art. See *In re Lee*, 61 U.S.P.Q. 2d 1430 (Fed. Cir. 2002) (holding that factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority). It is improper, in determining whether a person of ordinary skill would have

been led to this combination of references, simply to 'use that which the inventor taught against its teacher.') Further, even if combined, the teachings of the references are incompatible with the purposes of one another and with the invention.

In particular, the Examiner argues that "it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use Billing's planting system with Baird's ground cover in order to allot the user the versatility to change the plants being displayed." However, the present invention is not directed to the "display" of plants, but is directed to improving upon prior art non-raised, in-ground pot in pot methods, such as the available growing locations, the costs and ease of production, and the health and yield of container plants through the use of raised planting beds (such as in a nursery environment).

As set forth in Dr. Bilderback's declaration at ¶ 8 and his attached "Pot in Pot" article, as well as explained in the "Background" of applicant's specification, the use of pot in pot in-ground container plants, such as Billings '466, is well-known. However, neither current in-ground container plant production practices nor Billings '466 and Baird '049, either alone or in combination, suggest growing container plants in raised beds, and further do not disclose either individualized directed watering lines (to each container plant) or in-ground temperature control lines around container plants. See *Dr. Bilderback's Declaration; Mr. Fraleigh's Declaration*. Further, the references provide no suggestion of the many environmental benefits for container plant production detailed throughout Applicant's specification and provided by the claimed embodiments.

In addition, Billings '466 and Baird '049 neither individually or together suggest the unexpected advantages of reducing container plant flooding risks by growing

container plants in raised beds above flood-risk levels. *See Dr. Bilderback's Declaration at ¶ 9.* Baird '049 does not disclose container plants or the use of raised beds therewith. And teaching directly away from the present the invention, Billings '466 states that a "gardener need only remove the inner containers (with the plants or flowers contained therein) from the outer containers and place them in a safe place from the flooding or freezing temperatures." *See Billings '466 at col. 2, lines 59-63.* The claimed invention specifically provides a method and bed wherein the container plant is not required to be removed to avoid flooding (because the bed is raised) or in view of temperature concerns (claimed embodiments with temperature control line). It will also be appreciated that removal of hundreds or thousands of container plants in a nursery environment, as apparently suggested by Billings, would be highly impractical and very costly for each potential adverse stormwater or temperature event. Accordingly, the present invention provides a non-obvious solution for reducing costs and labor for container plant production by eliminating the necessity of removal of the container plant to avoid potential destruction of the container plants in undesirable conditions. *See Dr. Bilderback's Declaration at ¶ 9.*

The Examiner's suggestion that it is obvious to replace the bare-root plants and system of Baird '049 with the pot in pot container plants of Billings '466 to arrive at the present invention is not supported by the disclosures and also results in an incompatible modification of the references. First, there is no a suggestion in the references of the desirability of making such modification, a requirement of a prima facie case of obviousness. Further, where a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, there is no suggestion

or motivation to make the proposed modification. *See MPEP § 2143.01* As set forth in the attached declarations, one skilled in the art would not be motivated to combine a covered raised bed for growing bare-root plants as in Baird '049, which was already generally known in the art, with an uncovered, non-raised "pot in pot" system of Billings '466, also already generally known in the art, to arrive at the present invention. Specifically, if the pot in pot system of Billings '466 is utilized with the bare-root covered raised bed of Baird '049 that only teaches in-bed irrigation of the bare-roots, the container plant could not be hydrated since the container would block in-ground hydration. *See Dr. Bilderback's Declaration at ¶ 6; Mr. Fraleigh's Declaration at ¶ 4.*

And although Billings '466 discloses a water reservoir for delivering water by capillary action at col. 7, lines 39-65, there is no teaching or suggestion of providing any water source (rain?, hand?), and particularly not by an environmentally-conscious directed watering line to hydrate container plants in a raised-bed environment. Accordingly, the references fail to provide any motivation for combining Baird '049's teaching of an in-ground irrigation system with a container plant as in Billings '466, where Baird's irrigation would be blocked by Billings's container, and where Billings does not teach any water source to the container plant, particularly a directed line.

Further, Applicant respectfully submits for the Examiner's consideration that where well-known methods, such as non-raised pot in pot production methods and bare-root plant production using raised beds have been widely used, but others have failed to arrive at the solutions of the claimed invention, there is strong evidence that there is no previous motivation in the prior art to arrive at the present claims, and that the invention is therefore not obvious to those skilled in the art.

As the prior art provides no motivation to combine the Baird '049 and Billings '466 references to arrive at the present invention, and the references are incompatible with one another, Applicant respectfully requests that the Examiner's obviousness rejections to claims 1-10, 14-18 and 20-21 be withdrawn.

Applicant also respectfully submits that claim 11 is patentable over Baird in view of Billings and further in view of U.S. Pat. No. 4,437,263 to Nir et al. (Nir '263) for the same reasons provided above. In particular, Baird and Billings provide no motivation to arrive at the claimed limitation of a container plant in a raised bed. Further, Nir '263 either alone or in combination with the references, suggests no temperature control line for use with container plants, and Nir et al. specifically states that heat is diffused to the "root zone" of the vegetation (col. 2, line 32). Clearly, no motivation as to the desirability or construction of an in-ground temperature control line about a container plant is provided. Applicant therefore submits that claim 11 is also non-obvious over the cited references.

Applicant also submits that for the reasons detailed in the foregoing arguments and the attached declarations, that new claims 26-34 are allowable over the prior art. The new claims include the limitation of a container plant in a raised bed in combination with the limitation of a temperature control line for controlling the temperature surrounding the container plant. Neither of these limitations is taught in the prior art.

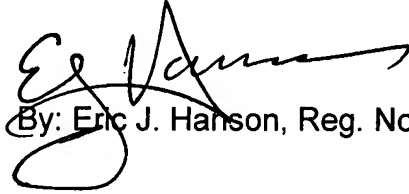
For the foregoing reasons, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

If any additional fees are due in connection with the filing of this Amendment or the accompanying papers, please charge the fees to SGR Deposit Account No. 02-

Appl. No. 10/642,389
Amdt. dated August 3, 2004
Reply to Office Action of May 19, 2004

4300, Order No. 040292.003. If an additional extension of time under 37 C.F.R. §1.136 is necessary that is not accounted for in the papers filed herewith, such an extension is requested. The additional extension fee should also be charged to SGR Deposit Account No. 02-4300, Order No. 040292.003. Any overpayment can be credited to Deposit Account No. 02-4300, Order No. 040292.003.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Eric J. Hanson", written over a circular stamp or mark.

By: Eric J. Hanson, Reg. No. 44,738

Dated: August 3, 2004
SMITH, GAMBRELL & RUSSELL, LLP
Suite 3100, Promenade II
1230 Peachtree Street, N.E.
Atlanta, Georgia 30309-3592
Telephone: (404) 815-3706
Facsimile: (404) 685-7006